



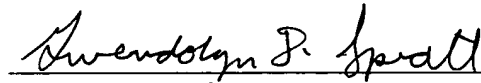
PATENT
10/506796

ATTORNEY DOCKET NO. 01231.0006U2
Application No. 10/506,796

The errors identified in the Raw Sequence Listing error Report have been corrected and include no new matter. Thus, the enclosed computer readable copy and paper copy of the Sequence Listing are believed to bring the Sequence Listing into full compliance with the sequence rules. Therefore, entry of the Sequence Listing is respectfully requested.

No additional fee is believed due. However, the Commissioner is hereby authorized to charge any additional fees which may be required, or credit any overpayment to Deposit Account No. 14-0629.

Respectfully submitted,

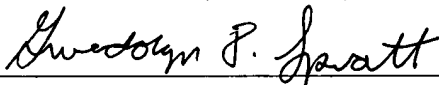


Gwendolyn D. Spratt
Registration No. 36,016

Needle & Rosenberg PC
Customer No.
Phone: 678/420-9300
Facsimile: 678/420-9301

CERTIFICATE OF MAILING UNDER 37 C.F.R. 1.8(a)

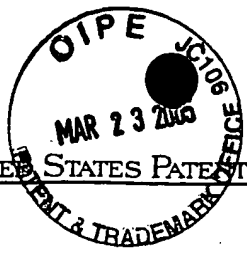
I hereby certify that this correspondence is being deposited with the United States Postal Service as first class mail in an envelope addressed to: Commissioner for Patents, P.O. Box 1450, Alexandria VA 22313-1450, on the date indicated below.



Gwendolyn D. Spratt

3-21-05

Date



Rec'd PCT TO 23 MAR 2005
10/506796

PCT of 2
307-seq

UNITED STATES PATENT AND TRADEMARK OFFICE

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Alexandria, Virginia 22313-1450
www.uspto.gov

U.S. APPLICATION NUMBER NO. 10/506,796	FIRST NAMED APPLICANT Tsafrir S. Mor	ATTY. DOCKET NO. 112624.00080
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INTERNATIONAL APPLICATION NO. PCT/US03/07073	
LA. FILING DATE 03/06/2003	PRIORITY DATE 03/06/2002

26707
QUARLES & BRADY LLP
RENAISSANCE ONE
TWO NORTH CENTRAL AVENUE
PHOENIX, AZ 85004-2391

LOCKETED

By [Signature] Date 3/19/05

Revised [Signature] Date

CONFIRMATION NO. 3586
371 FORMALITIES LETTER

OC00000001 4984822

Date Mailed: 01/19/2005

NOTIFICATION TO COMPLY WITH REQUIREMENTS FOR PATENT APPLICATIONS CONTAINING NUCLEOTIDE AND/OR AMINO ACID SEQUENCE DISCLOSURES

Applicant is given **TWO MONTHS FROM THE DATE OF THIS NOTICE** within which to file the items indicated below to avoid abandonment. Extensions of time may be obtained under the provisions of 37 CFR 1.136(a).

The following items **MUST** be furnished within the period set forth below:

- The nucleotide and/or amino acid sequence disclosure contained in this application does not comply with the requirements for such a disclosure as set forth in 37 CFR 1.821-1.825 for the following reason(s):
 - A copy of the "Sequence Listing" in computer readable form has been submitted. The content of the computer readable form, however, does not comply with the requirements of Annex C of the Administrative Instructions and 37 CFR 1.822 and/or 1.832, as indicated on the attached marked-up copy of the "Raw Sequence Listing."
 - APPLICANT MUST PROVIDE:
 - An initial or substitute paper copy or compact disc of the "Sequence Listing," as well as an amendment directing its entry into the specification.
- For questions regarding compliance to 37 CFR 1.821-1.825 requirements, please contact:
 - For Rules Interpretation, call (703) 308-4216
 - To Purchase PatentIn Software, call (703) 306-2600
 - For PatentIn Software Program Help, call (703) 306-4119 or e-mail at patin21help@uspto.gov or patin3help@uspto.gov

Applicant is reminded that any communications to the United States Patent and Trademark Office must be mailed to the address given in the heading and include the U.S. application no. shown above (37 CFR 1.5)

*A copy of this notice **MUST** be returned with the response.*

WINSTON M ALVARADO

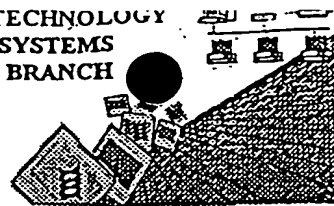
Telephone: (703) 305-6421

PART 1 - ATTORNEY/APPLICANT COPY

QBSL IP Dept.
Received on 1-28-05
Docket for CC: ALKE

U.S. APPLICATION NUMBER NO.	INTERNATIONAL APPLICATION NO.	ATTY. DOCKET NO.
10/506,796	PCT/US03/07073	112624.00080

FORM PCT/DO/EO/922 (371 Formalities Notice)



RAW SEQUENCE LISTING ERROR REPORT

The Biotechnology Systems Branch of the Scientific and Technical Information Center (STIC) detected errors when processing the following computer readable form:

Application Serial Number:

10506, 796

Source:

BT

Date Processed by STIC:

9/14/04

THE ATTACHED PRINTOUT EXPLAINS DETECTED ERRORS.

PLEASE FORWARD THIS INFORMATION TO THE APPLICANT BY EITHER:

- 1) INCLUDING A COPY OF THIS PRINTOUT IN YOUR NEXT COMMUNICATION TO THE APPLICANT, WITH A NOTICE TO COMPLY or,
- 2) TELEPHONING APPLICANT AND FAXING A COPY OF THIS PRINTOUT, WITH A NOTICE TO COMPLY

FOR CRF SUBMISSION AND PATENTIN SOFTWARE QUESTIONS, PLEASE CONTACT MARK SPENCER, TELEPHONE: 571-272-2510; FAX: 571-273-0221

TO REDUCE ERRORED SEQUENCE LISTINGS, PLEASE USE THE CHECKER
VERSION 4.2 PROGRAM, ACCESSIBLE THROUGH THE U.S. PATENT AND
TRADEMARK OFFICE WEBSITE. SEE BELOW FOR ADDRESS.

<http://www.uspto.gov/web/offices/pac/checker/chkrnote.htm>

Applicants submitting genetic sequence information electronically on diskette or CD-Rom should be aware that there is a possibility that the disk/CD-Rom may have been affected by treatment given to all incoming mail.

Please consider using alternate methods of submission for the disk/CD-Rom or replacement disk/CD-Rom.

Any reply including a sequence listing in electronic form should NOT be sent to the 20231 zip code address for the United States Patent and Trademark Office, and instead should be sent via the following to the indicated addresses:

1. EFS-Bio (<http://www.uspto.gov/ebc/efs/downloads/documents.htm>) , EFS Submission User Manual - ePAVE)
2. U.S. Postal Service: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450
3. Hand Carry, Federal Express, United Parcel Service, or other delivery service (EFFECTIVE 06/05/04):
U.S. Patent and Trademark Office, 220 20th Street S., Customer Window, Mail Stop Sequence, Crystal Plaza Two, Lobby,
Room 1B03, Arlington, VA 22202

Revised 05/17/04

I have mailed this report with the "go" Notice.

Winston Alvarado
National Stage Processing
Paralegal Specialist
(703) 305-6421

Raw Sequence Listing Error Summary

ERROR DETECTED

SUGGESTED CORRECTION

SERIAL NUMBER:

10/506,796

ATTN: NEW RULES CASES: PLEASE DISREGARD ENGLISH "ALPHA" HEADERS, WHICH WERE INSERTED BY PTO SOFTWARE

- 1 Wrapped Nucleics
Wrapped Aminos The number/text at the end of each line "wrapped" down to the next line. This may occur if your file was retrieved in a word processor after creating it. Please adjust your right margin to .3; this will prevent "wrapping."
- 2 Invalid Line Length The rules require that a line not exceed 72 characters in length. This includes white spaces.
- 3 Misaligned Amino Numbering The numbering under each 5th amino acid is misaligned. Do not use tab codes between numbers; use space characters, instead.
- 4 Non-ASCII The submitted file was not saved in ASCII(DOS) text, as required by the Sequence Rules. Please ensure your subsequent submission is saved in ASCII text.
- 5 Variable Length Sequence(s) contain n's or Xaa's representing more than one residue. Per Sequence Rules, each n or Xaa can only represent a single residue. Please present the maximum number of each residue having variable length and indicate in the <220>-<223> section that some may be missing
- 6 PatentIn 2.0 "bug" A "bug" in PatentIn version 2.0 has caused the <220>-<223> section to be missing from amino acid sequences(s). Normally, PatentIn would automatically generate this section from the previously coded nucleic acid sequence. Please manually copy the relevant <220>-<223> section to the subsequent amino acid sequence. This applies to the mandatory <220>-<223> sections for Artificial or Unknown sequences.
- 7 Skipped Sequences (OLD RULES) Sequence(s) missing. If intentional, please insert the following lines for each skipped sequence:
(2) INFORMATION FOR SEQ ID NO: X (insert SEQ ID NO where "X" is shown)
(i) SEQUENCE CHARACTERISTICS (Do not insert any subheadings under this heading!)
(xi) SEQUENCE DESCRIPTION: SEQ ID NO: X (insert SEQ ID NO where "X" is shown)
This sequence is intentionally skipped

Please also adjust the "(ii) NUMBER OF SEQUENCES" response to include the skipped sequences
- 8 Skipped Sequences (NEW RULES) Sequence(s) missing. If intentional, please insert the following lines for each skipped sequence:
<210> sequence id number
<400> sequence id number
000
- 9 Use of n's or Xaa's (NEW RULES) Use of n's and/or Xaa's have been detected in the Sequence Listing
Per 1.823 of Sequence Rules, use of <220>-<223> is MANDATORY if n's or Xaa's are present
In <220> to <223> section, please explain location of n or Xaa, and which residue n or Xaa represents
- 10 Invalid <213> Response Per 1.823 of Sequence Rules, the only valid <213> responses are: Unknown, Artificial Sequence, or scientific name (Genus/species). <220>-<223> section is required when <213> response is Unknown or is Artificial Sequence
- 11 Use of <220> Sequence(s) missing the <220> "Feature" and associated numeric identifiers. A response of "Unknown" is MANDATORY if <213> "Organism" response is "Artificial Sequence" or "Artificial Sequence". Please explain source of genetic material in <220> to <223> section.
(See "Federal Register," 07/01/1998, Vol. 63, No. 104, pp. 29631-32) (Sec. 1.823 of Sequence Rules)
- 2 PatentIn 2.0 "bug" Please do not use "Copy to Disk" function of PatentIn version 2.0. This causes a corrupted file, resulting in missing mandatory numeric identifiers and responses (as indicated on raw sequence listing). Instead, please use "File Manager" or any other manual means to copy file to floppy disk.
- 3 Misuse of n/Xaa "n" can only represent a single nucleotide; "Xaa" can only represent a single amino acid



PCT

RAW SEQUENCE LISTING

PATENT APPLICATION: US/10/506,796

DATE: 09/14/2004

TIME: 10:12:33

Input Set : A:\112624-00080 Utility.txt

Output Set: N:\CRF4\09142004\J506796.raw

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3 <110> APPLICANT: Arizona Board of Regents, on behalf of Arizona State
4 University
6 <120> TITLE OF INVENTION: COMPOSITION AND METHOD FOR ENHANCING IMMUNE RESPONSE
8 <130> FILE REFERENCE: 112624.00080
--> 10 <140> CURRENT APPLICATION NUMBER: US/10/506,796
--> 10 <141> CURRENT FILING DATE: 2004-09-03
10 <150> PRIOR APPLICATION NUMBER: PCT/US03/07073
11 <151> PRIOR FILING DATE: 2003-03-06
13 <150> PRIOR APPLICATION NUMBER: 60/362,247
14 <151> PRIOR FILING DATE: 2002-03-06
16 <160> NUMBER OF SEQ ID NOS: 9
18 <170> SOFTWARE: PatentIn version 3.2
20 <210> SEQ ID NO: 1
21 <211> LENGTH: 35
22 <212> TYPE: PRT
23 <213> ORGANISM: Human immunodeficiency virus type 1
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27 <221> NAME/KEY: PEPTIDE
28 <222> LOCATION: (1)..(35)
29 <223> OTHER INFORMATION: HIV-1 gp41 peptide portion (residues 650-685)
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34 1 5 10 15
37 Lys Trp Ala Ser Leu Trp Asn Trp Phe Asp Ile Thr Asn Trp Leu Trp
38 20 25 30
41 Tyr Ile Lys
42 35
45 <210> SEQ ID NO: 2
46 <211> LENGTH: 6
47 <212> TYPE: PRT
48 <213> ORGANISM: Human immunodeficiency virus type 1
51 <220> FEATURE:
52 <221> NAME/KEY: PEPTIDE
53 <222> LOCATION: (1)..(6)
54 <223> OTHER INFORMATION: HIV-1 gp41 peptide portion (residues 663-668)
56 <400> SEQUENCE: 2
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59 1 5
62 <210> SEQ ID NO: 3
63 <211> LENGTH: 36
64 <212> TYPE: PRT
65 <213> ORGANISM: Human immunodeficiency virus type 1
67 <400> SEQUENCE: 3

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Does Not Comply
Corrected Diskette Needed

(pg. 3)

RAW SEQUENCE LISTING

DATE: 09/14/2004

PATENT APPLICATION: US/10/506,796

TIME: 10:12:33

Input Set : A:\112624-00080 Utility.txt

Output Set : N:\CRF4\09142004\J506796.raw

69 Cys Ser Gln Thr Gln Gln Glu Lys Asn Glu Gln Glu Leu Leu Glu Leu
70 1 5 10 15
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74 20 25 30
77 Trp Tyr Ile Lys
78 35
81 <210> SEQ ID NO: 4
82 <211> LENGTH: 36
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84 <213> ORGANISM: Human immunodeficiency virus type 1
87 <220> FEATURE:
88 <221> NAME/KEY: PEPTIDE
89 <222> LOCATION: (1)..(35)
90 <223> OTHER INFORMATION: HIV-1 isolate MN clone v5 (residues 649-685)
92 <400> SEQUENCE: 4
94 Ser Gln Thr Gln Gln Glu Lys Asn Glu Gln Glu Leu Leu Gly Leu Asp
95 1 5 10 15
98 Lys Trp Glu Ser Leu Trp Asn Trp Phe Asp Ile Thr Asn Trp Leu Trp
99 20 25 30
102 Tyr Ile Lys Ile
103 35
106 <210> SEQ ID NO: 5
107 <211> LENGTH: 36
108 <212> TYPE: PRT
109 <213> ORGANISM: Human immunodeficiency virus type 1
112 <220> FEATURE:
113 <221> NAME/KEY: PEPTIDE
114 <222> LOCATION: (1)..(36)
115 <223> OTHER INFORMATION: HIV-1 isolate 593 clone (residues 649-685)
117 <400> SEQUENCE: 5
119 Ser Gln Asn Gln Gln Glu Lys Asn Glu Gln Glu Leu Leu Glu Leu Asp
120 1 5 10 15
123 Lys Trp Ala Gly Leu Trp Asn Trp Phe Glu Ile Thr Asn Trp Leu Trp
124 20 25 30
127 Tyr Ile Lys Ile
128 35
131 <210> SEQ ID NO: 6
132 <211> LENGTH: 36
133 <212> TYPE: PRT
134 <213> ORGANISM: Human immunodeficiency virus type 1
137 <220> FEATURE:
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139 <222> LOCATION: (1)..(36)
140 <223> OTHER INFORMATION: HIV-1 isolate 98BRRS012 (residues 649-685)
142 <400> SEQUENCE: 6
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145 1 5 10 15
148 Lys Trp Ala Asn Leu Trp Asn Trp Phe Asp Ile Thr Asn Trp Leu Trp
149 20 25 30

RAW SEQUENCE LISTING

PATENT APPLICATION: US/10/506,796

DATE: 09/14/2004

TIME: 10:12:33

Input Set : A:\112624-00080 Utility.txt

Output Set : N:\CRF4\09142004\J506796.raw

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153 35
156 <210> SEQ ID NO: 7
157 <211> LENGTH: 36
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159 <213> ORGANISM: Human immunodeficiency virus type 1
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163 <221> NAME/KEY: PEPTIDE
164 <222> LOCATION: (1)..(36)
165 <223> OTHER INFORMATION: HIV-1 isolate 1924v3.20 (residues 649-685)
167 <400> SEQUENCE: 7
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170 1 5 10 15
173 Lys Trp Ala Ser Leu Trp Asn Trp Phe Asp Ile Ser Asn Trp Leu Trp
174 20 25 30
177 Tyr Ile Lys Ile
178 35
181 <210> SEQ ID NO: 8
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183 <212> TYPE: DNA
184 <213> ORGANISM: Artificial Sequence
186 <220> FEATURE:
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200 tgaggctaag gtggagaagc tttgtgtgtg gaacaacaag actccacatg ctattgtctgc 360
202 cattagcatg gcaaatggtc ctggaccttc ccaaacccaa caagagaaga atgagcaaga 420
204 gcttttggag ttggacaagt ggcaagcctt tggaattggt ttgacatcac caattggctt 480
206 tggatatatca agatctctga gaaggatgaa ctctaagagc tc 522
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211 <212> TYPE: PRT
212 <213> ORGANISM: Artificial Sequence
214 <220> FEATURE:
215 <223> OTHER INFORMATION: Artificial Sequence
217 <400> SEQUENCE: 9
219 Met Ala Ile Lys Leu Lys Phe Gly Val Phe Phe Thr Val Leu Leu Ser
220 1 5 10 15
223 Ser Ala Trp Ala His Gly Thr Pro Gln Asn Ile Thr Asp Leu Cys Ala
224 20 25 30
227 Glu Tyr His Asn Thr Gln Ile His Thr Leu Asn Asp Lys Ile Phe Ser
228 35 40 45
231 Tyr Thr Glu Ser Leu Ala Gly Lys Arg Glu Met Ala Ile Ile Thr Phe
232 50 55 60
235 Lys Asn Gly Ala Thr Phe Gln Val Glu Val Pro Gly Ser Gln His Ile

pls explain source of
genetic material.

Invalid Response

see item

11 on

error
summary
sheet

pls explain source of
genetic material.

Invalid Response

pls see

item #

11 on

error
summary
sheet.

RAW SEQUENCE LISTING

PATENT APPLICATION: US/10/506,796

DATE: 09/14/2004

TIME: 10:12:33

Input Set : A:\112624-00080 Utility.txt

Output Set: N:\CRF4\09142004\J506796.raw

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240					85					90					95	
243	Ala	Thr	Leu	Thr	Glu	Ala	Lys	Val	Glu	Lys	Leu	Cys	Val	Trp	Asn	Asn
244				100					105					110		
247	Lys	Thr	Pro	His	Ala	Ile	Ala	Ala	Ile	Ser	Met	Ala	Asn	Gly	Pro	Gly
248				115					120					125		
251	Pro	Ser	Gln	Thr	Gln	Gln	Glu	Lys	Asn	Glu	Gln	Glu	Leu	Leu	Glu	Leu
252		130							135				140			
255	Asp	Lys	Trp	Ala	Ser	Leu	Trp	Asn	Trp	Phe	Asp	Ile	Thr	Asn	Trp	Leu
256	145					150					155				160	
259	Trp	Tyr	Ile	Lys	Ile	Ser	Glu	Lys	Asp	Glu	Leu					
260					165					170						

VERIFICATION SUMMARY

PATENT APPLICATION: US/10/506,796

DATE: 09/14/2004

TIME: 10:12:34

Input Set : A:\112624-00080 Utility.txt
Output Set: N:\CRF4\09142004\J506796.raw

10 M:270 C: Current Application Number differs, Replaced Current Application No
10 M:271 C: Current Filing Date differs, Replaced Current Filing Date